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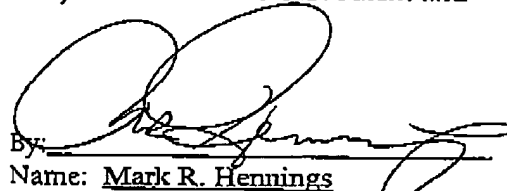
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Applicant: Joseph P. R. Tosey  
Serial No.: 09/551,919  
Filed: April 19, 2000  
Confirmation No.: 3485  
Due Date: February 7, 2006  
Title: OPERATING SESSION REAUTHORIZATION IN A USER-OPERATED DEVICE

Examiner: Beemner W. Dada  
Group Art Unit: 2135  
Docket: 50014.0001US01  
Notice of Allow.  
Date:

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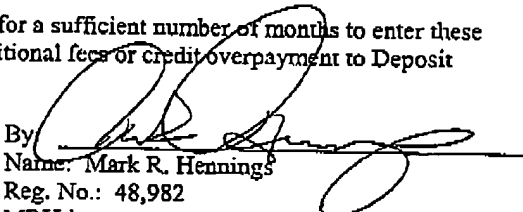
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Name: Mark R. Hennings

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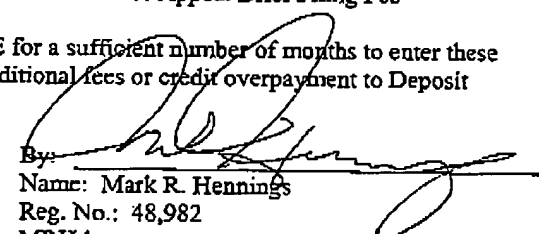
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A/N 09/551,919

PATENTIN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Joseph P.R. Tosey	Examiner:	B. Dada
Application No.:	09/551,919	Group Art Unit:	2135
Filed:	April 19, 2000	Docket No.:	50014.1US01
Title:	OPERATING SESSION REAUTHORIZATION IN A USER-OPERATED DEVICE		

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By:   
Name: Mark R. Hennings

APPELLANT'S BRIEF ON APPEAL

Box Appeal Brief  
Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

This Brief is presented in support of the Notice of Appeal filed December 7, 2005, from the final rejection of claims 1-36 of the above-identified application, as set forth in the Office Action mailed September 7, 2005.

A check for \$500.00 to cover the required filing fee for filing this Brief is enclosed.

02/09/2006 WABDELRI 00000021 132725 09551919

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The PTO did not receive the following  
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**I. REAL PARTY IN INTEREST**

The present application is assigned of record to Glenayre Electronics, Inc., of Charlotte, North Carolina.

## **II. RELATED APPEALS AND INTERFERENCES**

No other appeals or interferences that will directly affect, be directly affected by, or have a bearing on the present appeal are known to Appellants, Appellants' legal representatives, or the Assignee.

### **III. STATUS OF CLAIMS**

Claims 1-34 were originally filed as part of the subject application. Claims 35 and 36 have been added during prosecution. All the claims stand rejected and are the subject of this Appeal. The claims are reproduced in the Appendix.

#### **IV. STATUS OF AMENDMENTS**

A final Office Action was mailed September 7, 2005, in which the Action deemed the application not in condition for allowance. In response, Appellants filed a Notice of Appeal on December 7, 2005.



## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

Referring to Figures 1-3, and pages 1-13 of the specification, the present invention is directed towards an authorization processes for use in a user-operated device. As discussed on page 1, line 8 and following of the specification, the authorization process involves authentication processes to help ensure that only authorized users can operate the device. Authentication is often used to prevent others from accessing confidential information available through the device or unauthorized services. Examples of conventional authentication processes shown in page 1 of the specification include (a) multi-step login processes involving usernames and passwords, (b) biometrics units that can determine whether the user is authorized by sensing a physical feature of the user, and (c) security devices (e.g., encryption ring) that are physically carried by the user to "unlock" the personal computing device. In each of these examples, the authentication process determines whether the user himself or herself is authorized to gain (or maintain) access to the device. As discussed in page 2, line 5 of the specification, an operating session (wherein the user can operate the device in a normal manner) is established.

As discussed on page 2, lines 7-9, the operating session is terminated (or suspended) if the user does not operate the device for first period of time that is an extended period of time (as in an "idle timeout"). After the rapid idle timeout has been reached, a second predetermined time period ("update timeout period") begins (page 4, lines 18-24). During the second predetermined time period, the device prevents a user from operating the device unless the user provides an authentication-update event within the second predetermined time period. If the second predetermined time period is exceeded, the operating session cannot be continued unless

the authentication process (such as logging in again) is successfully completed. (See page 5, lines 3 and following.)

As discussed on page 2, lines 17-30, the authorization-update process is significantly faster (or having fewer steps) than the initial authorization process. Thus, as claimed, the authentication-update process is also significantly faster (or more convenient) than the original authentication process. Note that authorization (at least) determines whether a user can gain access to a device, and that authentication as discussed above (at least) determines whether a particular user can gain access to a device.

The means for authenticating a user to start an operating session is found in the specification at page 1, line 7 through page 2, line 10, item designation #17.

The means for detecting when the user is not operating the user-operated device is found in the specification at page 3, lines 25-31, page 4, lines 8-13 and item designation #19.

The means for suspending the operating session if the user has not operated the user-operated device for a first predetermined period is found in the specification at page 4, lines 14-17 and item designation #12.

The means for updating authentication of the user and re-entering the operating session if the user updates authentication within a second predetermined time period is found in the specification at page 4, line 18 through page 5, line 2 and item designation #11.

The means for prompting the user to provide a login entry is found in the specification at page 3, lines 12-31 and item designation #14, #16.

The means for receiving a login entry from the user is found in the specification at page 3, lines 12-31 and item designation #15.

The means for prompting the user to provide a password is found in the specification at page 3, lines 12-31 and item designation #16.

The means for receiving a password from the user is found in the specification at page 3, lines 12-31 and item designation #15.

The means for verifying that the received login entry and password correspond to an authorized user is found in the specification at page 3, lines 12-31 and item designation #11, #12.

The means for providing a prompt that the operating session has been suspended is found in the specification at page 2, lines 21-25 and item designation #30.

The means for updating authentication comprises means for receiving a predetermined signal from the user of the user-operated device is found in the specification at page 3, lines 21-24, page 6, lines 14-22.

The means for receiving a predetermined signal comprises means for selecting a predetermined icon displayed by the user-operated device is found in the specification at page 6, lines 9-13.

The means for receiving a predetermined signal comprises means for selecting a predetermined character displayed by the user-operated device is found in the specification at page 5, line 30 through page 6, line 13.

The means for receiving a predetermined signal comprises means for placing a cursor at a predetermined coordinate on a display of the user-operated device is found in the specification at page 6, lines 23-29.

The means for receiving a predetermined signal comprises means for receiving a predetermined voice signal from the user of the user-operated device is found in the specification at page 6, lines 14-22.

# **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

The issues presented for this appeal are (1) whether claims 1, 7, 11-12, 18, 22-23, 29, 33, are rendered obvious by U.S. Patent No. 5,875,345 (Naito) in view of U.S. Patent No. 5,664,097 (Johnson '097); (2) whether claim 35 is rendered obvious by U.S. Patent No. 5,875,345 (Naito) in view of U.S. Patent No. 5,664,097 (Johnson '097), (3) whether claim 36 is rendered obvious by U.S. Patent No. 5,875,345 (Naito) in view of U.S. Patent No. 5,664,097 (Johnson '097), and (4) whether claims 8-10, 19-21, and 30-32 are rendered obvious Naito in view of Johnson'097, and further in view of U.S. Patent No. 6,209,104 (Jalili).

Accordingly, the issue to be decided in this appeal is whether the art of record renders obvious an authentication update process performed during a second predetermined time after an operating session has been suspended.

### **VII. GROUPING OF CLAIMS**

For purposes of this appeal alone, claims 1-7, 11-17, 22-29, and 33-34 are considered to stand or fall together. Additionally, claims 8-10, 18-21, and 30-32 are considered to stand or fall together

### VIII. ARGUMENT

Appellant submits that the present invention is not taught or suggested by Naito, Johnson '097, or Jalili, either singly or in motivated combination for any of the following reasons.

**A. Naito in view of Johnson does not teach or suggest teach performing an authentication update when the system resumes within the second predetermined time period (Claims 1, 12, and 23)**

Claim 1 recites in part, "continuing the operating session if the user performs an authentication-update process within a second predetermined time period after the operating session is suspended; and continuing the operating session if the user performs the authentication process after the operating session is suspended and the second predetermined time period is exceeded." Claims 1, 12, 23 are substantially similar, albeit different in important ways.

Appellants respectfully contend that the Examiner has interpreted the disclosure of Naito in view of Johnson '097 erroneously. More specifically, as the Office Action admits, Naito does not explicitly teach performing authentication when the system resumes within the second predetermined time period. In fact, Naito teaches prompting for a password input when the system resumes from the power saving mode after a second predetermined time has elapsed or not prompting for a password input when the system resumes from the power saving mode within the second predetermined time (3:63-4:4). The Office action further asserts that it would have been obvious to combine the reference with Johnson\_097 because it would include a process to delay locking up of a user interface as per teachings of Johnson\_097.

Appellants note that the proposed motivation is inapposite and is not directed toward the claim limitations, namely that the proposed motivation of including a process to delay locking up of a user interface does not do that which the claim recites. In claim 1, the operating session is **already suspended** (and the user locked out from normal operation) at the end of the first predetermined time period. As discussed below, the user is **still actively using the device** and the security mechanism (lockout) is delayed while valid inputs are being accepted by the user interface (note that the valid user inputs are in context of normal user operation, not an authentication process). Hence, the motivation to delay the lockout cannot apply, because the user is already locked out (according to the claimed invention) before the second predetermined time period even begins.

Furthermore, Johnson '097 fails to teach or suggest a user performing an authentication-update process within a second predetermined time period after the operating session is suspended. Johnson '097 instead teaches a data processing system for delaying the activation of of an inactivity security mechanism by determining whether a detected signal is merely noise or valid speech (4:22-31). The delay of the inactivity security mechanism does not authenticate, or perform an authentication update, on a user. Instead "due to its general input properties, a voice recognition system will pick up background noise," which might be interpreted as a user input by the security mechanism (1:67-2:3). Accordingly, the system comprises stored sample of valid user inputs (4:28), to distinguish from non-user types of inputs such as noise (2:45-51). Thus Johnson '097 fails to teach authentication of the user, and also fails to teach performing and continuing the operating session (after an operating session suspension) if the user performs an authentication update. Accordingly, the asserted art teaches away from the present invention by



not suspending the operating session before the second predetermined time period, and, instead, by delaying authentication until after the second predetermined time period has expired.

The Office Action further states that one would have been motivated to make such a modification in order to further enhance the usability of the system by preventing multiple inputs of user passwords and only requiring simple recognizable user inputs to delay activation of inactivity security mechanisms. The reasoning of "preventing multiple inputs of user passwords" is again inapposite to the claim language because the claim language recites performing an authentication update (which, for example, may entail entering passwords during the second predetermine time period). The reasoning of "only requiring simple recognizable user inputs to delay activation of inactivity security mechanisms" is not also directed towards the claim limitation of performing authentication updates within a second predetermined time period. The reasoning is inapposite because the delay of activation of inactivity security mechanisms actually works to postpone performing an authentication of the user.

Thus, Naito fails to teach continuing the operating session if the user performs an authentication-update process within a second predetermined time period after the operating session is suspended. Furthermore, Johnson '097 also fails to teach authentication within the second predetermined time period (and instead teaches detecting user inputs during a normal operating session, and non-background noise inputs when using voice recognition during the normal operating session to delay activation of security mechanisms). The delay of the activation of security mechanisms does not authenticate a user by determining whether a particular user is operating the system. Accordingly, there is no suggestion, other than applicant's own disclosure, to employ an authentication-update process during a second time interval that occurs after operating session is suspended.

Additionally, there is nothing in the references that would suggest incorporating the claimed **authentication-update** process within a second predetermined time period **after** the operating session is suspended. Thus, the teachings of Johnson\_097 are merely directed towards delay of the suspension of the operating system (which is before the expiration of the **first** time period), and contain no suggestion of being incorporated in a **second** period that occurs **after** the first time period.

As mentioned above, Naito fails to teach continuing the operating session if the user performs the **authentication process** after the operating session is suspended and the second predetermined time period is exceeded. In contrast, Naito teaches that the “second predetermined time is a reference period of time for determining whether or not a password input should be requested before recovering the task, and is called a ‘security time’” (col. 4, lines 24-28). Thus, the second predetermined time of Naito is used for determining **whether to perform** an authentication process, and is **not** used for performing an authentication, wherein the operating session is continued if the **authentication update has been successful**. Accordingly, Naito fails to teach performing an authentication process during the second predetermined time period.

Thus, the primary and secondary references singly or in motivated combination fail to teach a second predetermined time period that relates to an authentication-update process, and do not singly or in a motivated combination anticipate the limitations of claims 1, 12, and 23. Accordingly, claims 1, 12, and 23 are not obvious over Naito in view of Johnson\_097 and are submitted to be allowable.

**B. Naito in view of Johnson does not teach or suggest teach performing an authentication update when the system resumes within the second predetermined time period, wherein the authentication-update process comprises fewer steps than the authentication process (Claim 35)**

Claim 35 recites, "continuing the operating session if the user performs an authentication-update process within a second predetermined time period after the operating session is suspended, wherein the authentication-update process comprises fewer steps than the authentication process; and continuing the operating session if the user performs the authentication process after the operating session is suspended and the second predetermined time period is exceeded."

The Office Action rejected Claim 35 on the same grounds as Claim 1. Claim 35 recites limitations that are similar to Claim 1, although Claim 35 recites the limitation that the authentication update process comprises fewer steps than the authentication process. Appellants assert that Claim 35 is patentably distinct from Naito in view of Johnson '097 for at least the reasons set forth above, and for the additional reasons that follow.

As discussed above, Naito and Johnson '097 neither singly or in motivated combination teach or suggest suspending the operating session, and performing an authentication update when the system resumes within the second predetermined time period. The cited references further fail to teach or suggest that the authentication update comprises less steps (e.g., faster and more convenient) than the authentication used to establish the operating session. Instead Naito teaches prompting for a password input after the second predetermined has elapsed and does not prompt for a password input within the second predetermined time. Accordingly there is no teaching or suggestion that there be an authentication update that comprises fewer steps than the

authentication used to establish the operating session. Claim 35 is thus submitted to be allowable.

**C. Naito in view of Johnson does not teach or suggest teach an authentication-update process further comprises inputting from a keyboard a predetermined signal from the user within the second predetermined time period (Claim 36)**

Claim 36 recites, "wherein the authentication-update process further comprises inputting from a keyboard a predetermined signal from the user within the second predetermined time period."

The Office Action rejected Claim 36 on similar grounds as Claim 1. Claim 36 recites limitations that are similar to Claims 1 and 35, although Claim 36 recites the limitation that the authentication update process further comprises inputting from a keyboard a predetermined signal from the user within the second predetermined time period. Appellants assert that Claim 36 is patentably distinct from Naito in view of Johnson '097 for at least the reasons set forth above, and for the additional reasons that follow.

As discussed above, Naito and Johnson '097 neither singly or in motivated combination teach or suggest suspending the operating session, and performing an authentication update when the system resumes within the second predetermined time period. The cited references further fail to teach or suggest that the authentication update that comprises less steps (e.g., faster and more convenient) than the authentication used to establish the operating session. Instead Johnson '097 recognizes valid user inputs in voice recognition as discussed above during the normal operating session (before the second predetermined has begun) and does not prompt for a password input within the second predetermined time. Accordingly there is no teaching or

suggestion that there be an authentication update that comprises inputting from a keyboard a predetermined signal from the user within the second predetermined time period. Claim 36 is thus submitted to be allowable.

**D. Naito in view of Johnson further in view of Jalili does not teach or suggest teach a predetermined icon, character, or coordinate (Claims 8-10, 19-21, 30-32)**

Claims 8-10, 19-21, 30-32 recite in part the limitations that the authentication update process comprises inputting a predetermined signal, character, or coordinate to the user-operated device within the second predetermined time period

The Office Action rejected Claims 8-10, 19-21, 30-32 on similar grounds as Claim 1. Claims 8-10, 19-21, 30-32 recites limitations that are similar to Claims 1, although Claims 8-10, 19-21, 30-32 recites the limitation that the authentication update process further comprises inputting a predetermined signal, character, or coordinate to the user-operated device within the second predetermined time period. Appellants assert that Claims 8-10, 19-21, 30-32 are patentably distinct from Naito in view of Johnson '097 further in view of Jalili for at least the reasons set forth above, and for the additional reasons that follow.

As discussed above, Naito and Johnson '097 neither singly or in motivated combination teach or suggest suspending the operating session, and performing an authentication update when the system resumes within the second predetermined time period. The Office Action proposes that Jalili can be combined with Naito in view of Johnson '097 because the modification provides a system that is not easily susceptible to the over-the-shoulder problem. Appellants maintain that this proposed motivation is again in apposite because the "over-the-shoulder" disclosure of the authentication update would not grant an unauthorized user (having gained the

authentication update predetermined signal through observation) access to the system because the user at a later time would have to undergo the authentication process (and not necessarily the authentication update process). Accordingly there is no teaching or suggestion that there be an authentication update that comprises inputting a predetermined signal such as a icon, character, or coordinate from the user within the second predetermined time period. Claims 8-10, 19-21, and 30-32 are thus submitted to be allowable.

### CONCLUSION

Appellants submit that the rejection is untenable for the reasons set forth above and should be reversed.

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Respectfully submitted,

MERCHANT & GOULD P.C.

Date:

February 7, 2006

Mark R. Hennings

Registration No. 48,982

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APPENDIX

1. A method of authorizing a user to operate a user-operated device, the method comprising:

performing an authentication process to start an operating session;

detecting when the user is not operating the user-operated device;

suspending the operating session if the user has not operated the user-operated device for a first predetermined period;

continuing the operating session if the user performs an authentication-update process within a second predetermined time period after the operating session is suspended; and

continuing the operating session if the user performs the authentication process after the operating session is suspended and the second predetermined time period is exceeded.

2. The method of claim 1 wherein the authentication process comprises:

prompting the user to provide a login entry;

receiving a login entry from the user;

prompting the user to provide a password;

receiving a password from the user; and

verifying that the received login entry and password correspond to an authorized user.

3. The method of claim 1 further comprising providing a prompt that the operating session has been suspended.



4. The method of claim 3 wherein the prompt comprises displaying a plurality of icons.
5. The method of claim 3 wherein the prompt comprises entering a screen saver mode.
6. The method of claim 3 wherein the prompt comprises an audio signal.
7. The method of claim 1 wherein the authentication update process comprises inputting a predetermined signal to the user-operated device within the second predetermined time period.
8. The method of claim 7 wherein inputting a predetermined signal comprises selecting a predetermined icon displayed by the user-operated device.
9. The method of claim 7 wherein inputting a predetermined signal comprises selecting a predetermined character displayed by the user-operated device.
10. The method of claim 7 wherein inputting a predetermined signal comprises placing a cursor at a predetermined coordinate on a display of the user-operated device.
11. The method of claim 7 wherein inputting a predetermined signal comprises providing a predetermined audio voice signal to the user-operated device.
12. An apparatus for authorizing a user to operate a user-operated device, the apparatus comprising:
  - means for authenticating a user to start an operating session;
  - means for detecting when the user is not operating the user-operated device;

means for suspending the operating session if the user has not operated the user-operated device for a first predetermined period; and

means for updating authentication of the user and re-entering the operating session if the user updates authentication within a second predetermined time period.

13. The apparatus of claim 12 wherein the means for authenticating comprises:

means for prompting the user to provide a login entry;

means for receiving a login entry from the user;

means for prompting the user to provide a password;

means for receiving a password from the user; and

means for verifying that the received login entry and password correspond to an authorized user.

14. The apparatus of claim 12, further comprising means for providing a prompt that the operating session has been suspended.

15. The apparatus of claim 14 wherein the prompt comprises displaying a plurality of icons.

16. The apparatus of claim 14 wherein the prompt comprises entering a screen saver mode.

17. The apparatus of claim 14 wherein the prompt comprises an acoustic signal.

18. The apparatus of claim 12 wherein the means for updating authentication comprises means for receiving a predetermined signal from the user of the user-operated device.

19. The apparatus of claim 18 wherein the means for receiving a predetermined signal comprises means for selecting a predetermined icon displayed by the user-operated device.

20. The apparatus of claim 18 wherein the means for receiving a predetermined signal comprises means for selecting a predetermined character displayed by the user-operated device.

21. The apparatus of claim 18 wherein the means for receiving a predetermined signal comprises means for placing a cursor at a predetermined coordinate on a display of the user-operated device.

22. The apparatus of claim 18 wherein the means for receiving a predetermined signal comprises means for receiving a predetermined voice signal from the user of the user-operated device.

23. A device that is operable by a user during an operating session, the device comprising:

a user interface configured to provide user-understandable signals and to receive signals from the user; and

a control unit coupled to the user interface, wherein the control unit is configured to:

perform an authentication process with the user, the authentication process determining whether a user attempting to operate the device is an authorized user, wherein an operating session is started if the control unit determines that the user is an authorized user, the device entering an authenticated mode,

measure elapsed time from when the user last operated the device when the device is in the authenticated mode, the elapsed time being reset each time the user operates the device while the device is in the authenticated mode,

suspend the authenticated operating session if the elapsed time measured by the user reaches a first predetermined value, the device entering a suspended mode,

perform an authentication-update process with the user, the authentication-update process determining whether the user is an authorized user, wherein the device re-enters the authenticated mode to continue the operating session if the user completes the authentication-update process before the elapsed time reaches a second predetermined value, and

if the elapsed time exceeds the second predetermined time period, perform the authentication process with the user before re-entering the authenticated mode to continue the operating session.

24. The device of claim 23 wherein the authentication process comprises:

prompting the user to provide a login entry;

receiving a login entry from the user;

prompting the user to provide a password;

receiving a password from the user; and

verifying that the received login entry and password correspond to an authorized user.

25. The device of claim 23 wherein the device is further configured to provide a prompt when the device enters the suspended mode.

26. The device of claim 25 wherein the prompt comprises displaying a plurality of icons.
27. The device of claim 25 wherein the prompt comprises entering a screen saver mode.
28. The device of claim 25 wherein the prompt comprises an audio signal.
29. The device of claim 23 wherein the authentication-update process comprises the user inputting a predetermined signal to the device through the user-interface within the second predetermined time period.
30. The device of claim 29 wherein inputting a predetermined signal comprises selecting a predetermined icon displayed by the device through the user-interface.
31. The device of claim 29 wherein inputting a predetermined signal comprises selecting a predetermined character displayed by the device through the user-interface.
32. The device of claim 29 wherein inputting a predetermined signal comprises placing a cursor at a predetermined coordinate on a display, the display being part of the user-interface.
33. The device of claim 29 wherein inputting a predetermined signal comprises providing a predetermined audio voice signal to the device through the user-interface.
34. The device of Claim 29 wherein inputting a predetermined signal comprises the user looking at a predetermined character at a location displayed on the user-interface, the

user interface being configured to determine the location on the user-interface at which the user is looking.

35. A method of authorizing a user to operate a user-operated device, the method comprising:

performing an authentication process to start an operating session;

detecting when the user is not operating the user-operated device;

suspending the operating session if the user has not operated the user-operated device for a first predetermined period;

continuing the operating session if the user performs an authentication-update process within a second predetermined time period after the operating session is suspended, wherein the authentication-update process comprises fewer steps than the authentication process; and

continuing the operating session if the user performs the authentication process after the operating session is suspended and the second predetermined time period is exceeded.

36. The method of claim 35 wherein the authentication-update process further comprises inputting from a keyboard a predetermined signal from the user within the second predetermined time period.

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